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7 Ways to Avoid Hazardous Waste Fines

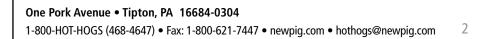
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Catastrophic chemical spills and their resulting huge, six- to eight-figure fines make the headline news and serve as bold reminders of what happens when things go terribly wrong. What typically doesn't make the news are the thousands of smaller spills from drums and other containers, IBC totes, tanks, hoses and all sorts of machinery that result in violations and smaller, five-figure fines. These get piled on hundreds of facilities every year but are usually avoidable with a little advance planning and some easy-to-follow, proven practices.

Fines for not having a contingency plan, failing to inspect containers regularly and not providing or documenting training programs can be stiff, and may not even be triggered by a spill event. Environmental Protection Agency (EPA) auditors look for incomplete and dysfunctional processes during visits. Getting out in front of spills BEFORE they happen and installing solid plans are the best ways to avoid the most common spill events (and fines) and to respond appropriately when they do happen.

Little details are easy to overlook – especially when production goals need to be met and the facility has never had a big spill before. But, failing to do the little things often leads to bigger problems. The EPA governs all of those little hazardous waste management details under the Resource Conservation Recovery Act (RCRA). This set of regulations applies to generators of hazardous wastes as well as hazardous waste transporters and treatment, storage and disposal facilities. In this PIG Paper, you'll learn about seven common hazardous waste violations and how to avoid them.





1. Identifying Hazardous Waste [40 CFR 262.11]

Every facility generates waste, and for every type of waste that is generated, a waste determination needs to be made. This includes liquid wastes as well as wastes like absorbents, rags, wipes and spent filters.

RCRA provides definitions for "waste" and both "solid" and "hazardous" wastes — as well as lists of "exempted" wastes — in 40 CFR 261. But, basically a waste is anything that is no longer useful to the facility.

RCRA uses the term "solid waste" as part of the definition of what constitutes a hazardous waste. But it's important to know that RCRA's definition of "solid waste" actually includes wastes in liquid, gas and solid states. Hazardous wastes need to be properly identified so that they can be handled, collected, managed, stored, labeled and recycled or disposed of correctly. When hazardous wastes are not properly identified, they can present problems. For example, an international shipping company was fined \$689,800 for not providing the correct

information about the type, quantity and weight of the hazardous materials onsite and being shipped on their aircraft. Their failure to identify, correctly label and manifest hazardous products could potentially lead to hazardous reactions or other problems during onsite storage, transport or disposal.



Hazardous wastes must be clearly identified so workers can handle, collect, manage, store and dispose of them properly.



2. Secondary Containment [40 CFR 264.175]

When a primary container fails, secondary containment systems and devices keep hazardous spills corralled until they can be cleaned up. Secondary containment also keeps spills away from drains, waterways and other sensitive areas and helps to minimize the overall area that needs to be cleaned up, remediated and decontaminated.

To comply with secondary containment requirements, a system or device must:

- Be impervious to the liquids it will contain
- Be free of gaps or cracks
- Have a base that is sloped, raised or otherwise designed so that containers do not remain in contact with spilled liquids
- Have sufficient capacity to hold 10% of the total volume of all of the containers stored in it, or 100% of the volume of the largest container, whichever is greater
- Prevent run-on from entering, or be large enough to accommodate both a spill and run-on from rain or snowmelt
- Be cleaned out in a timely manner when spills or water collect in the containment area

Secondary containment systems can take several forms. They can be preconstructed, raised, portable sumps; concrete berms; collapsible systems; and in some cases even earthen dikes. In addition to containing spilled liquids, secondary containment systems also help keep incompatible materials segregated and can help establish or define hazardous waste storage areas.

The EPA can impose penalties of up to \$25,000 per day for violating secondary containment requirements. During an environmental audit of a large chemical facility, the EPA found a number of violations, including secondary containment structures for several aboveground storage tanks that had cracks that would have allowed chemicals to leak out of the containment systems. The combined penalty for this and other violations at the site was over \$2.5 million.

Examples of sufficient storage capacity:

Storing two 55-gallon drums: 10% of all = 10% of 110 gallons = 11 gallons <u>or</u> 100% of one = 55 gallons You need 55 gallons of capacity!

Storing one hundred 5-gallon pails: 10% of all = 10% of 500 gallons = 50 gallons <u>or</u> 100% of one = 5 gallons You need 50 gallons of capacity!



Prevent rain from reaching outdoor containers by storing them in covered spill containment pallets.



3. Container Labeling [40 CFR 262.16(b), 40 CFR 262.17(a)(5)]

Without labels, it is difficult to know what's in a container. Unlabeled containers can lead to a variety of problems from worker safety issues like mixing incompatible materials or storing wastes onsite longer than they are permitted.

Hazardous waste containers need to be clearly marked so that employees (and inspectors) can identify their contents. Containers in hazardous waste storage areas also need to be "clearly marked" with accumulation start dates and the words "hazardous waste" [40 CFR 262.16(b) and 40 CFR 262.17(a)(5)]. Before containers of hazardous wastes are shipped offsite, they must also contain any language required by Department of Transportation regulations [49 CFR 172].

Labeling containers properly helps keep waste streams segregated so that materials can be more effectively recycled or disposed of. For example, if a facility has three waste streams (used oil, a chlorinated solvent and an aqueous coolant), keeping each waste stream separate improves safety and allows each of the wastes to be recycled at a much lower cost.



Determine what wastes, hazardous or not, should be segregated by labeling containers with contents.



4. Satellite Accumulation [40 CFR 262.15]

RCRA regulations govern centralized hazardous waste accumulation areas. Wastes must be removed from the facility within a certain amount of time if the facility does not have a permit to treat, store or dispose of the wastes. Large-quantity generators (those who generate more than 1,000 kg of hazardous waste per month) can only accumulate wastes onsite for 90 days. Small-quantity generators (those who generate 100 to 999 kg of hazardous waste per month) have 180 days — or 270 days, if the waste will be shipped more than 200 miles — to accumulate wastes onsite without a permit.

The accumulation start date for hazardous wastes begins on the day that the first drop of waste enters the container. For small facilities that don't generate a lot of hazardous waste, it may take more than 180 days for them to fill a drum, which could lead to paying a hauler to transport less than a full drum of waste to avoid the violation of having it onsite longer than 180 days. This is costly for both the generator and the hauler.

To help those facilities avoid excessive waste hauling costs and the need for a permit, the EPA created the satellite accumulation regulation, which allows generators to accumulate up to 55 gallons of hazardous waste (or one quart of acutely hazardous waste) at or near the point of its generation without triggering waste accumulation start dates.

Although the requirements for satellite accumulation areas are less restrictive than centralized hazardous waste accumulation areas, they must still be managed properly. Common violations in satellite accumulation areas include:

- Not marking the collection container with the words "hazardous waste"
- Not locating the container at or near the point of waste generation
- Not keeping containers closed
- Storing more than 55 gallons of hazardous waste in the satellite accumulation area
- Not moving excess waste to the centralized accumulation area within three calendar days
- Failure to perform weekly inspections



Adhere to EPA regulations in satellite accumulation areas to avoid violations.

The use of satellite accumulation areas can also help facilities minimize the chance for leaks and spills. Because wastes are collected near their point of generation, employees don't have to carry their wastes from the processing area to a centralized collection point every day, decreasing the possibility of leaks and drips happening along the way.



5. Training [40 CFR 262.17(a)(7)]

Environmental compliance plans may look nice sitting on a shelf, but if they are not communicated, understood and used by employees, they are meaningless. The lack of adequate training is a common problem that can lead to improper handling of hazardous wastes.

Training helps employees understand their role in managing hazardous wastes safely. It helps them see the need for proper handling of hazardous wastes, teaches them how to avoid spills and how to clean them up quickly and safely when they do happen.

Failure to provide training can be very costly. The nation's largest retailer was recently fined over \$80 million for failure to train employees about proper hazardous waste management. This fine was levied because employees in several different states routinely dumped paints, bleach, pesticides and other hazardous materials into drains or placed them in dumpsters with nonhazardous wastes instead of labeling and managing them properly.



Failure to train employees how to manage hazardous waste can cost companies millions of dollars.



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6. Closed Containers [40 CFR 262.16(b)(2)(ii), 40 CFR 262.17(a)(1)(iv)]

Containers without lids allow fugitive emissions to become airborne, causing both indoor and outdoor air quality problems. They also increase the likelihood of spills if the container is bumped or knocked over. This is why RCRA requires containers holding hazardous waste to be kept closed, except when waste is being added to or removed from the container.

Closed containers are required in satellite accumulation areas as well as centralized accumulation areas. The EPA has even issued guidance on what constitutes a closed container. A container is considered to be closed when "all openings or lids are properly and securely affixed." But wrestling a bolt ring onto a lid every time waste needs to be added to a drum can be a hassle. Latching lids and funnels help to facilitate this process by allowing fast access to the drum and maintaining a secure seal when the lid is replaced.





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Latching drum funnels and lids provide fast access to hazardous waste containers while keeping them compliant with EPA standards.

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7. Contingency Planning [40 CFR 262.16(b)(8), 40 CFR 262.17(a)(6)]

Who responds when there is a spill? Where should employees go when the fire alarm sounds? Where are spill supplies kept? What happens if the state issues a flood or hurricane warning?

Contingency plans are written documents that:

- Identify possible problems or emergencies that could occur at the facility
- Describe processes in place to avoid emergencies and incidents
- Outline the steps that will be taken when an incident occurs
- List who is responsible for any actions that need to be taken
- Outline training requirements for employees
- Document the response equipment and items that are available to help take care of incidents



Create plans and backup plans that detail what employees should do in certain hazardous waste spill situations.

Contingency plans are unique to every facility and need to be maintained and updated periodically or when processes, equipment or personnel change. When contingency plans are in place and everyone at the facility is trained to know what to do during and after a spill or other emergency, safety is easier to ensure and the incident can be mitigated faster.

Avoid spills and keep employees safe by properly managing hazardous waste. Having plans in place and communicating them through training is the best way to lower your risk and avoid violations and fines. Doing the little things well is far less expensive than paying the fines associated with noncompliance.



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